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**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION**

<b>Hangzhou Chic Intelligent Technology Co. and Unicorn Global Inc., Plaintiffs v. THE PARTNERSHIPS AND UNINCORPORATED ASSOCIATIONS IDENTIFIED ON SCHEDULE A, Defendants.</b>	<b>Case No. :20-cv-04806 Judge Thomas M. Durkin Magistrate Judge Jeffery Cole</b>
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**EXPERT DECLARATION OF PAUL HATCH REGARDING  
INFRINGEMENT OF U.S. PATENTS D737,723, D738,256, D784,195, and D785,112**

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### I. INTRODUCTION

I have been retained by counsel as an independent expert witness to provide my opinion regarding the above litigation matter, and matters related to the U.S. Patents D737,723,

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D738,256, D784,195, and D785,112 (“the Patents-In-Suit”). (Dkt. 37-11). This declaration is in support of Plaintiffs Hangzhou Chic Intelligent Technology Co. and Unicorn Global Inc.’s (collectively “Hangzhou”) motion for a preliminary injunction.

Hangzhou requested that I opine on the similarities between the design claimed in the Patents-In-Suit and the defendant’s four hoverboard products (collectively, the “Accused Products”).

I understand my task is to review materials and offer my opinion, perspective and insights regarding this subject. I hold the opinions expressed in this declaration, but as my study of the case continues, I may acquire additional information that leads to new insights relevant to these opinions. With that in mind, I reserve the right to supplement this declaration if and when such additional information becomes known to me. I may also provide supplemental and rebuttal declarations in response to arguments which may be proposed by the Defendant.

#### **A. Summary**

I have considered the appearance of the Claimed Designs and the Accused Products from the viewpoint of the ordinary observer who is familiar with the relevant prior art.

Having performed this analysis and evaluation, it is my opinion that the overall appearance of each of the Accused Products is not “plainly dissimilar” to one or more of the Claimed Designs of the Patents-In-Issue, as I understand that term to be understood in Patent Law.

I also conclude that an ordinary observer familiar with the prior art, giving such attention as a purchaser usually gives, would find the overall appearance of each Accused Product to be substantially the same as the overall appearance of one or more of the Claimed Designs in light of the prior art, inducing him or her to purchase each Accused Product supposing it to be the Claimed Design.

#### **B. Background and Qualifications**

I am the recently retired CEO of TEAMS Design USA, a global product design consultancy. I have over 25 years of product design and industrial design experience and have designed many mass-produced products, including consumer electronics, personal mobility equipment such as Segways, and electric bicycles. In my company, I was actively involved in all phases of the development process, including the user research, idea conceptualization, styling, visual brand language, development, engineering and overseeing the final production stages.

I reside at 718 S. Oakley Blvd, Chicago, Illinois. I hold a Bachelor of Arts degree with honors (BA (Hons)) in Design for Industry (Industrial Design) from the University of Northumbria at Newcastle, United Kingdom. While studying to obtain my honors degree in Industrial Design, I took courses covering subjects including technical drawing, computer aided drawing, product styling and brand language, ergonomics, product evaluation, usability testing, production techniques, prototyping, mechanical engineering, and production techniques.

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In the course of my work as a designer and managing teams of designers, I have gained an understanding of the training, knowledge, skills, and abilities of a person skilled in the art of product design and industrial design. Through this work, I have also gained an understanding of how a person who purchases a particular product perceives and appreciates the visual appearance and or functional merits of a product’s design, and I use this understanding to opine on how the particular purchaser or ordinary observer would answer questions raised in the examination of design patents, utility patents, trademarks, and trade dress claims. I am the named inventor in over 45 design and utility patents. I have written papers and spoken at many universities across the U.S. on the subject of visual perception, where I share information from psychological and neurological studies into how humans perceive things such as physical products, what physical attributes we notice (if any), and how meaning is attached to what we see.

I was recently nominated into the prestigious IDSA Academy of Fellows. I have also been awarded many design awards, including the “Design of the Decade Award” from Business Week. In 2016 I was elected onto the board of IDSA as Director-at-Large. Further information on my professional experience is detailed in my curriculum vitae, which is set forth in *Appendix A*. I have previously provided expert testimony in many other patent-related matters, a detailed list of cases for which I have provided expert testimony is attached as *Appendix B*.

**C. Compensation and Prior Testimony**

I am being compensated at a rate of \$450 per hour to provide analysis and testimony in this proceeding. My compensation is not contingent on the outcome of any matter or the specifics of my testimony. I have no financial interest in the outcome of this matter.

**D. Materials and Information Considered**

In forming my opinions, I have reviewed the claimed design of the Patents-In-Suit; their file history; the prior art cited on the face of the patent; and the Accused Products. The list of materials I reviewed in my analysis is included in *Appendix C*.

**E. Methodology Used in Preparing this Declaration**

I examined the above-mentioned products, patents and supporting documents. I also examined samples of the Commercial Embodiments. I applied my extensive research and expertise in industrial design and visual perception in preparing this Declaration.

My methodology used to prepare this declaration is presented as follows:

- a. I will introduce the Patents-In-Suit, identify the scope of the Patents-In-Suit, and identify distinct ornamental features regarding the same.
- b. I will introduce the prior art cited on the face of the Patents-In-Suit.
- c. I will introduce the Accused Products.
- d. I will compare the similarities and differences between each of the claimed designs of the Patents-In-Suit and the Accused Products, and explain how an ordinary observer would perceive the Claimed Designs and Accused Products in light of the prior art.

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## II. LEGAL STANDARDS

I am not a lawyer. Rather, I am an industrial designer and base my analysis on the legal guidelines provided to me as outlined below.

### A. The Limiting Purpose of a Design Patent

I understand that a U.S. patent does not grant the owner the right to use the invention, rather, the owner is granted the right, for a limited period of time, to prevent others from making, using, offering for sale, or selling the patented invention in the United States or importing the patented invention into the United States. In other words, the government grants the patent owner **the right to limit other people’s use** of the invention. To construe the scope of a design patent, I understand that one must also consider the prosecution history of the patent application. *See Goodyear Tire*, 162 F.3d at 1116 and Hatch §§ II.B.

### B. Legal Principles in Analysis of Design Patent Infringement

It is my understanding that “[w]hether a design patent is infringed is determined by first construing the claim to the design, when appropriate, and then comparing it to the design of the accused device.” *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1404 (Fed. Cir. 1997) (citing *Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571, 1577 (Fed. Cir. 1995)).

I understand that, under precedent from the U.S. Court of Appeals for the Federal Circuit (“the Federal Circuit”), “trial courts have a duty to conduct claim construction in design patent cases, as in utility patent cases[.]” *Egyptian Goddess*, 543 F.3d at 679. “[T]he court has recognized that design patents ‘typically are claimed as shown in drawings,’ and that claim construction ‘is adapted accordingly.’” *Id.* (quoting *Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc.*, 501 F.3d 1314, 1319 (Fed. Cir. 2007)). Given the “difficulties entailed in trying to describe a design in words, the preferable course . . . [is] not to attempt to ‘construe’ a design patent claim by providing a detailed verbal description of the claimed design.” *Egyptian Goddess*, 543 F.3d at 679.

As I understand, after a design patent’s claim is construed, the claim “must be compared to the accused design to determine whether there has been infringement.” *Elmer*, 67 F.3d at 1577. I understand that infringement occurs when an ordinary observer “giving such attention as a purchaser usually gives, [deems] two designs are substantially the same” meaning “the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other.[.]” *Egyptian Goddess*, 543 F.3d at 670 (quoting *Gorham Co. v. White*, 81 U.S. 511, 528 (1872)).

I am also aware that infringement is determined “in light of the prior art” by “applying the ordinary observer test through the eyes of an observer familiar with the prior art.” *Egyptian Goddess*, 543 F.3d at 677. Thus, the hypothetical ordinary observer is presumed to have a complete knowledge of all relevant prior art.

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I understand that a design patent infringement analysis is a two-step process. The first step is to consider whether the Claimed Design and Accused Products are “sufficiently distinct” also known as “plainly dissimilar.” *Ethicon*, 796 F.3d at 1335 (citing *Egyptian Goddess*, 543 F.3d at 678). If the Claimed Design and the Accused Products are found to be plainly dissimilar, there is no patent infringement. *Id.*

But, “if the claimed and accused designs are not plainly dissimilar,” I understand that the second step in an infringement analysis involves a three-way comparison to compare “the patented and accused designs in the context of similar designs found in the prior art.” *Egyptian Goddess*, 543 F.3d at 674. “[I]f the accused design has copied a particular feature of the claimed design that departs conspicuously from the prior art, the accused design is naturally more likely to be regarded as deceptively similar to the claimed design, and thus infringing.” *Id.* at 677.

As I understand, these “[d]ifferences, however, must be evaluated in the context of the Claimed Design as a whole, and not in the context of separate elements in isolation. Where, as here, the Claimed Design includes several elements, the fact finder must apply the ordinary observer test by comparing similarities in overall designs, not similarities of ornamental features in isolation.” *Ethicon*, 796 F.3d at 1335 (citing *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1295 (Fed. Cir. 2010). *See also Crocs, Inc. v. Int’l Trade Comm’n*, 598 F.3d 1294, 1303-1304 (Fed. Cir. 2010). “[T]he mandated overall comparison is a comparison taking into account significant differences between the two designs, not minor or trivial differences that necessarily exist between any two designs that are not exact copies of one another.” *Int’l Seaway Trading Co. v. Walgreens Corp.*, 589 F.3d 1233, 1243 (Fed. Cir. 2009).

### **C. Claim Construction in Design Patents**

As I understand, courts construe claims for a design patent just as for a utility patent. *Goodyear Tire & Rubber Co. v. Hercules Tire & Rubber Co., Inc.*, 162 F.3d 1113, 1116 (Fed. Cir. 1998). That said, I understand that the Federal Circuit has cautioned against a detailed, verbal construction of the features in the patent drawings. *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679 (Fed. Cir. 2008) (en banc). This is because a written claim construction focused on individual features may lead the factfinder away from “consideration of the design as a whole.” *Crocs*, 598 F.3d at 1303.

I also understand that the Federal Circuit has cautioned against a detailed, verbal construction of the features in the patent drawings. *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679 (Fed. Cir. 2008) (en banc). This is because a written claim construction focused on isolated features may lead the factfinder away from “consideration of the design as a whole.” *Crocs*, 598 F.3d at 1303. However, while the claimed design of a design patent is better represented by an illustration, it is helpful to the finder of fact to be provided with guidance on the overall impression of the claimed design on the ordinary observer. *Contessa Food Prods., Inc. v. Conagra, Inc.*, 282 F.3d 1370, 1376 (Fed. Cir. 2002).

To construe the scope of a design patent, I understand that one must consider (1) the language of the specification to determine whether the written description disclaims, characterizes, or

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limits any features; (2) whether the figures identify unclaimed subject matter (e.g., features depicted in broken lines); and (3) whether the prosecution history of the application shows if the applicant disclaimed subject matter or distinguished the Claimed Design from the prior art based on certain features present or absent in the graphics. *See Goodyear Tire*, 162 F.3d at 1116.

I am also informed that the Manual of Patent Examining Procedure (“MPEP”) provides guidance on how broken lines are to be used in design patent drawings. U.S. Pat. & Trademark Office, Manual of Patent Examining Procedure § 1503.02 (9th ed. 2018). Section 1503.02.III notes that broken lines include “[s]tructure that is not part of the claimed design, but is considered necessary to show the environment in which the design is associated” and that structure “may be represented in the drawing by broken lines.” *Id.* Such “[u]nclaimed subject matter must be described as forming no part of the claimed design or of a specified embodiment thereof.”

I am also informed that “in analyzing infringement, the fact finder must compare the **claimed portion** of the design—i.e., whatever is shown in solid lines in the patent drawings—to the corresponding portion of the accused design.” (emphasis added) *Burstein, The “Article of Manufacture”* in 1887, *supra* note 12, at 11 (first citing *Hutzler Mfg. Co. v. Bradshaw Int’l, Inc.*, No. 1:11-cv-07211, 2012 WL 3031150, at \*9–10 (S.D.N.Y. July 24, 2012); and then citing *Egyptian Goddess*, 543 F.3d at 672).

#### **D. The Significance of Prior Art**

As I understand, the role of prior art is to help the finder of fact consider seemingly small or minor details that differentiate the patented design from the prior art. “Where there are many examples of similar prior art designs . . . , differences between the claimed and accused designs that might not be noticeable in the abstract can become significant to the hypothetical ordinary observer who is conversant with the prior art.” *Egyptian Goddess*, 543 F.3d at 678.

For the purposes of my opinion, I considered prior art to define the scope of the hoverboard market at the time the Claimed Designs were filed. In so doing, I was able to better discern the similarities and differences (or lack thereof) between the Claimed Designs and the Accused Products in the eyes of the ordinary observer.

#### **E. Definition of the Ordinary Observer**

I understand that the hypothetical ordinary observer must be identified before applying the ordinary observer test by focusing on the actual product that is presented for purchase, and the ordinary purchaser of that product. The hypothetical ordinary observer is different for each case, based on the type of product at issue. As explained above, the determination of the substantial similarity is based on the viewpoint of the ordinary observer who is “not an expert in the claimed designs” but rather one of *ordinary* acuteness who is a principal purchaser of the product. The hypothetical ordinary observer is also one who is aware of the number of closely similar prior art designs and conversant with the prior art.

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I also understand, “[t]he measure of infringement of a design patent is deception of the ordinary observer, when such person gives the design the attention usually given by a purchaser of the item bearing the design[.]” *Goodyear Tire*, 162 F.3d at 1117. Further, I understand that some courts have held that the ordinary observer is one who is “not an expert in the claimed designs”, but rather “one of ordinary acuteness who is a principal purchaser[]” of the product. *Ethicon*, 796 F.3d at 1337 (internal quotations and citation omitted). That said, the ordinary observer is one who is “aware of the great number of closely similar prior art designs” and “conversant with the prior art”. *Egyptian Goddess*, 543 F.3d at 676, 678.

Under *Gorham*, the ordinary observer is through the “eyes of men generally” and not individuals “versed in designs in the particular trade in question” or “engaged in the manufacture or sale of articles containing such designs”. *Gorham Co. v. White*, 81 U.S. 511, 527-528 (1871).

Based on my experience as an Industrial Designer of commercial products, including electronic mobility products and consumer electronics, it is my opinion that an ordinary observer in this case is the typical purchaser of hoverboards, i.e., a consumer user or the parent of a user, each having little or no experience purchasing hoverboards. The ordinary observer encounters products like the Claimed Designs via online stores, television and entertainment media, and social media, and purchases them using online stores or from ‘brick and mortar’ stores like Best Buy or Walmart.

### **III. ANALYSIS OF THE PATENTS-IN-SUIT AND THE PRIOR ART**

#### **A. The Patents-In-Suit**

The four Patents-In-Suit are the U.S. Patents D737,723 (“the ‘723 Patent”), D738,256 (“the ‘256 Patent”), D784,195 (“the ‘195 Patent”), and D785,112 (“the ‘112 Patent”) for Self-Balancing Vehicles, and Human-Machine Interaction Vehicles. Such self-balancing vehicles are commonly referred to as “hoverboards”.

As mentioned above, the scope of the claim of a patented design encompasses its visual appearance as a whole, and in particular the visual impression it creates to the ordinary observer.

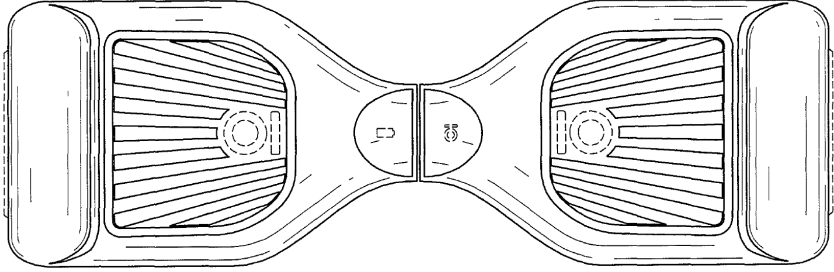
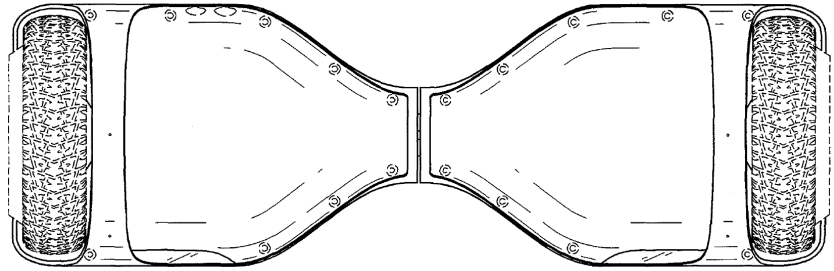
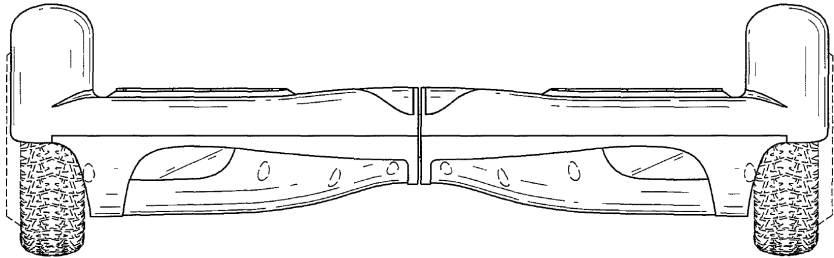
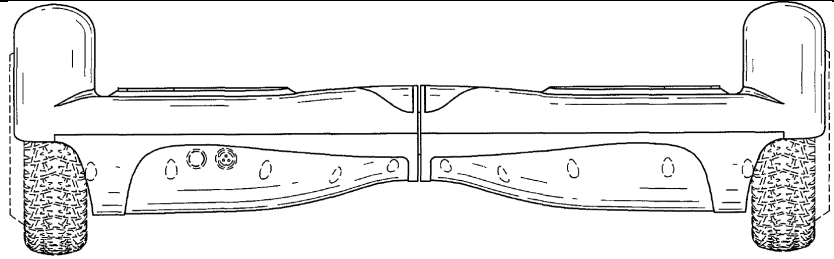
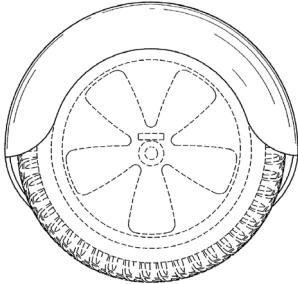
#### **B. Examination of the ‘723 Patent**

The ‘723 Patent is titled “Self-Balancing Vehicle” and has a filing date of Dec 15, 2014. It claims priority to a foreign application CN 201430180556.4 dated 6/13/2014.

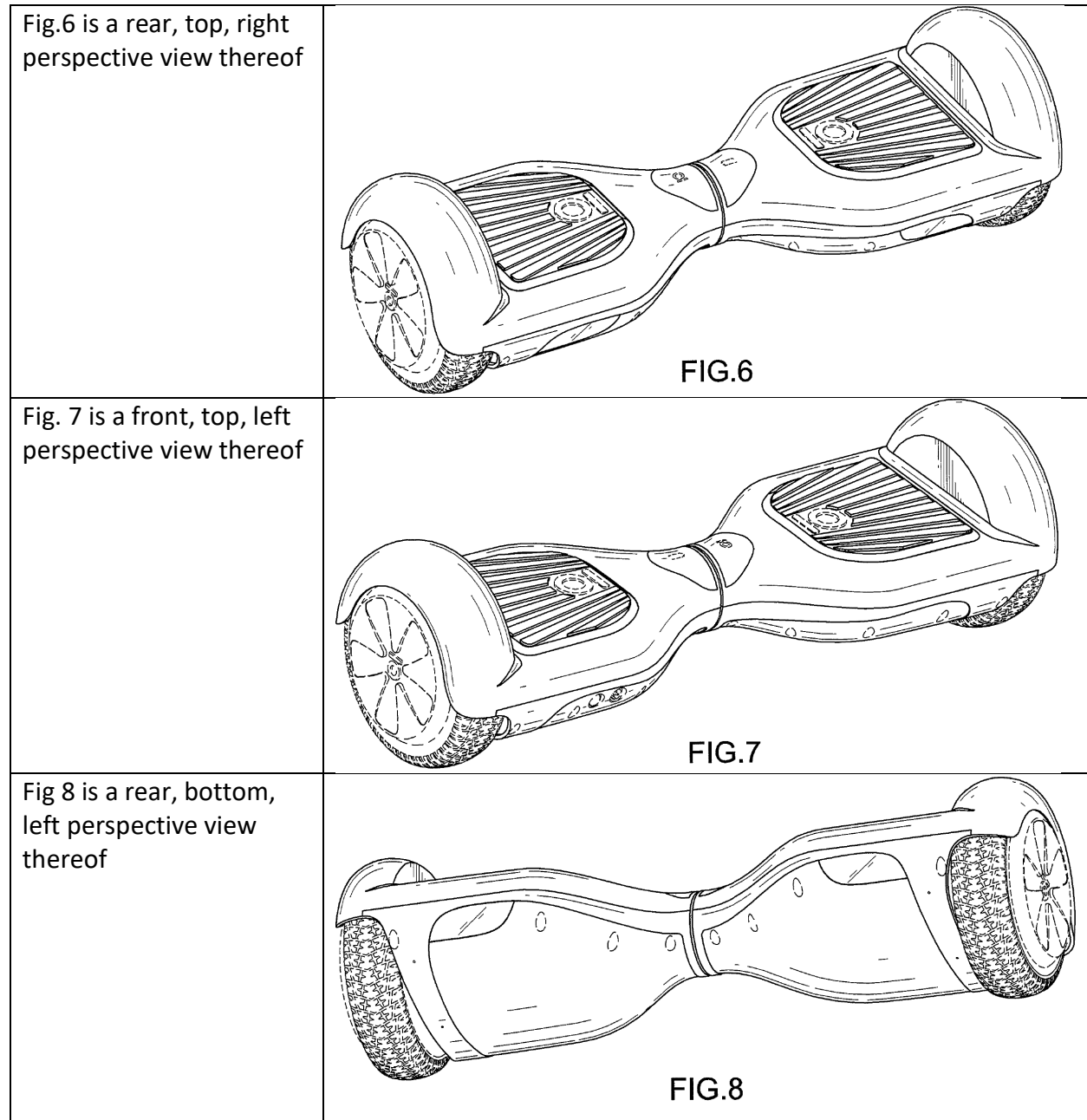
The patent has 8 figures, and states “the broken line showing is for the purpose of illustrating portions of the self-balancing vehicle and environment structure which form no part of the claimed design”.



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Table 1: The Claimed Design of the '723 Patent	
Fig.1 is a top plan view of a self-balancing vehicle showing our new design	 <p style="text-align: center;">FIG.1</p>
Fig.2 is a bottom plan view thereof	 <p style="text-align: center;">FIG.2</p>
Fig 3 is a rear elevational view thereof	 <p style="text-align: center;">FIG.3</p>
Fig. 4 is a front elevation view thereof	 <p style="text-align: center;">FIG.4</p>
Fig 5. Is a left side view thereof, the right side view being a mirror image thereof.	

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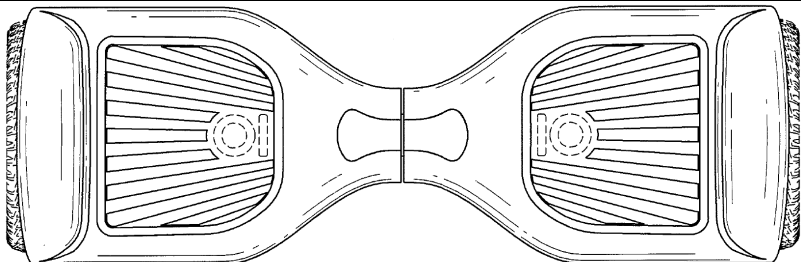
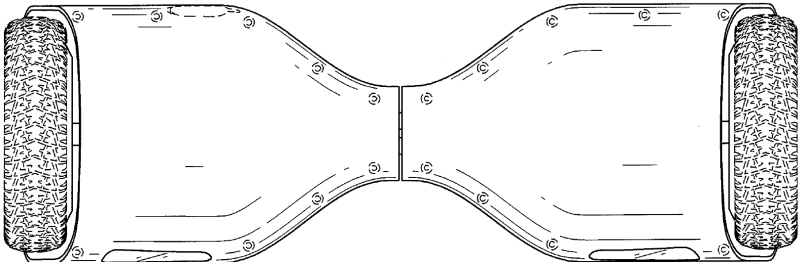
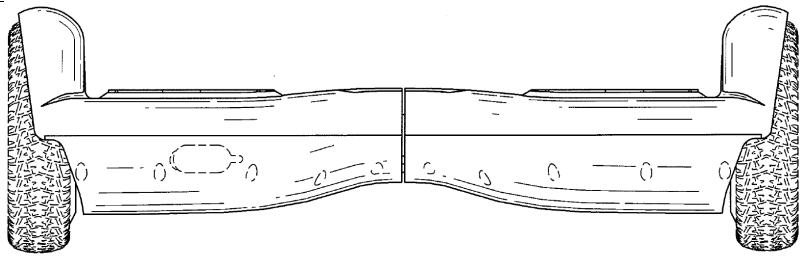
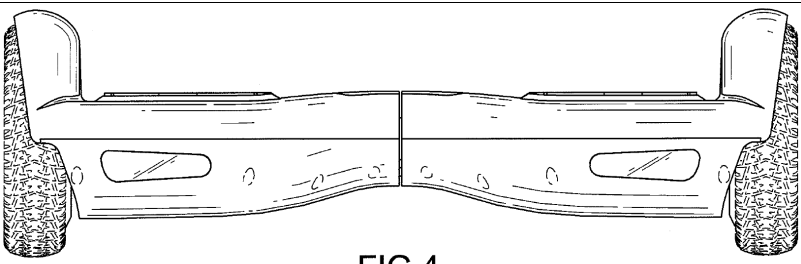
What is claimed is the overall ornamental design of a Self-Balancing Vehicle as described in the patent and shown in the figures. The claimed design does not include the areas shown in broken lines, such as the wheels, holes on the underside, the “O I” pattern, and the on/off graphics.

I have reviewed the prosecution history of the ‘723 Patent, and it consistent with my opinion of the claim scope. The claimed design was allowed over all the prior art that was cited in the file history.

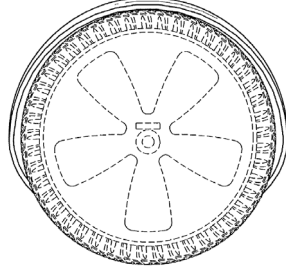
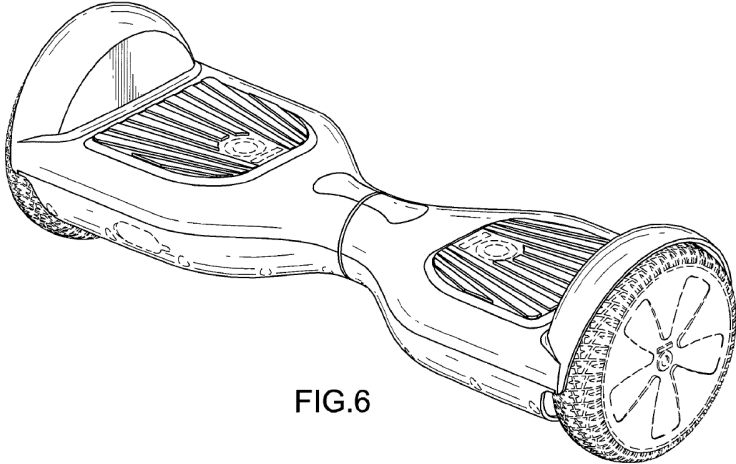
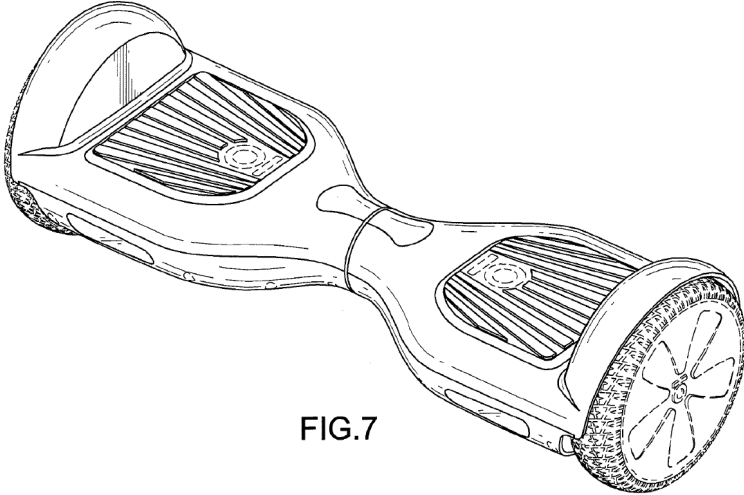
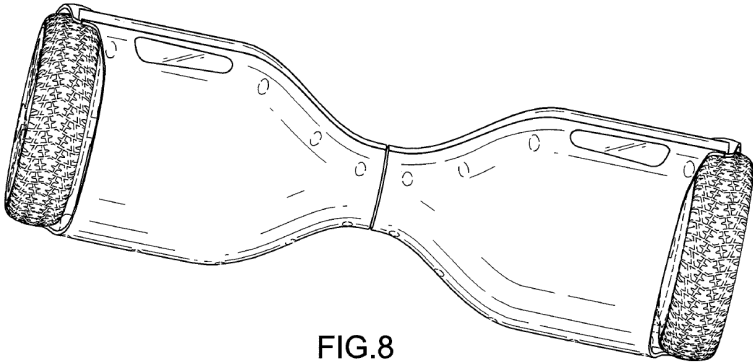
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**C. Examination of the ‘256 Patent**

The ‘256 Patent is also titled “Self Balancing Vehicle” and has a filing date of Dec 15, 2014. The patent has 8 figures, and states “the broken line showing is for the purpose of illustrating portions of the self-balancing vehicle and environment structure which form no part of the claimed design”.

<b>Table 2: The Claimed Design of the ‘256 Patent</b>	
Fig.1 is a top plan view of a self-balancing vehicle showing our new design	 <p style="text-align: center;"><b>FIG.1</b></p>
Fig.2 is a bottom plan view thereof	 <p style="text-align: center;"><b>FIG.2</b></p>
Fig 3 is a rear elevational view thereof	 <p style="text-align: center;"><b>FIG.3</b></p>
Fig. 4 is a front elevation view thereof	 <p style="text-align: center;"><b>FIG.4</b></p>

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<p>Fig 5. Is a left side view thereof, the right side view being a mirror image thereof</p>	
<p>Fig.6 is a rear, top, right perspective view thereof</p>	 <p>FIG.6</p>
<p>Fig. 7 is a front, top, left perspective view thereof</p>	 <p>FIG.7</p>
<p>Fig 8 is a rear, bottom, left perspective view thereof</p>	 <p>FIG.8</p>

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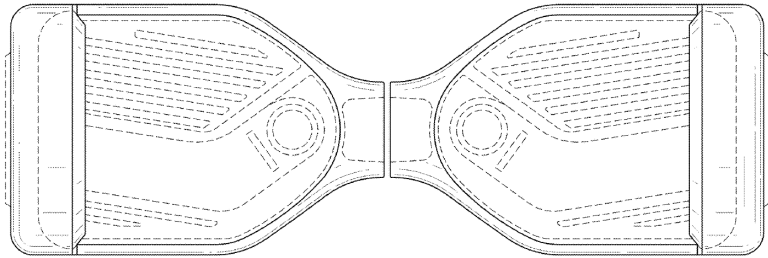
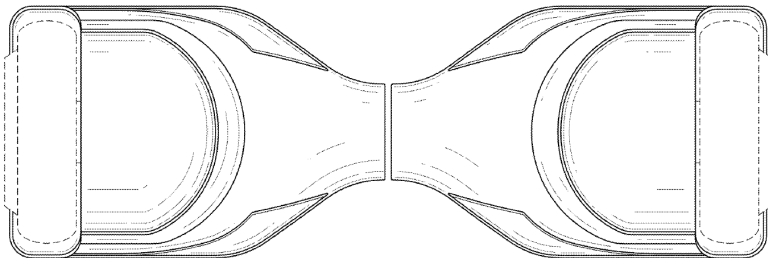
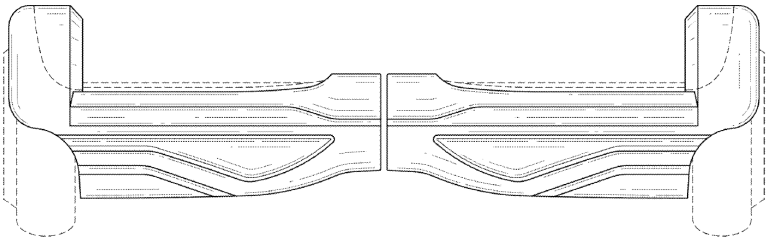
What is claimed is the overall ornamental design of a Self-Balancing Vehicle as described in the patent and shown in the figures. The claimed design does not include the areas shown in broken lines, such as the wheels, holes on the underside, and the “O I” pattern.

I have reviewed the prosecution history of the ‘256 Patent, and it consistent with my opinion of the claim scope. The claimed design was allowed over all the prior art that was cited in the file history.

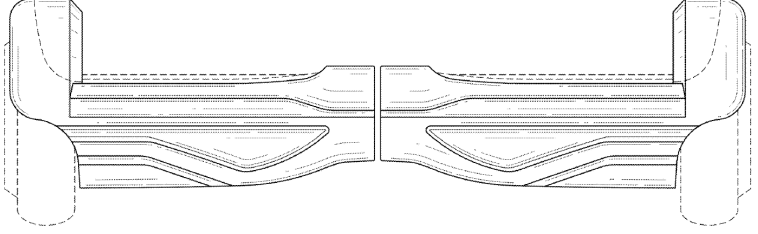
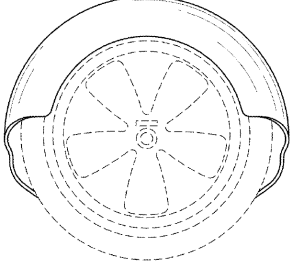
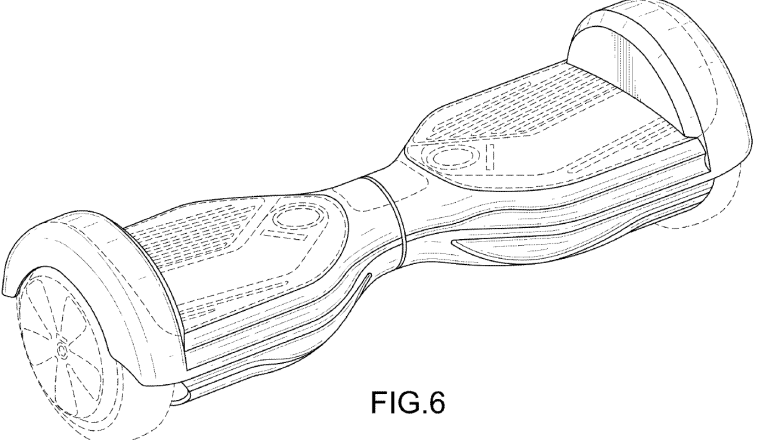
#### D. Examination of the ‘195 Patent

The ‘195 Patent is titled “Human-Machine Interaction Vehicle” and has a filing date of Feb 29, 2016. It claims priority to a foreign application 201530389352.6 dated 10/9/2015

The patent has 6 figures, and states “the broken lines are for the purpose of illustrating portions of the human-machine interaction vehicle and environmental structure which form no part of the claimed design”.

Table 3: The Claimed Design of the ‘195 Patent	
Fig. 1 is a top plan view of a human-machine interaction vehicle showing my new design	 <p>FIG.1</p>
Fig. 2 is a bottom plan view thereof	 <p>FIG.2</p>
Fig. 3 is a front elevational view thereof	 <p>FIG.3</p>

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<p>Fig. 4 is a rear elevational view thereof</p>	 <p style="text-align: center;">FIG.4</p>
<p>Fig. 5 is a right side view thereof, the left side view being a mirror image thereof</p>	
<p>Fig. 6 is a top, rear, right perspective view thereof</p>	 <p style="text-align: center;">FIG.6</p>

What is claimed is the overall ornamental design of a Human-Machine Interaction Vehicle as described in the patent and shown in the figures. The claimed design does not include the areas shown in broken lines, such as the wheels, and various patterns and lines on the top surfaces.

I have reviewed the prosecution history of the ‘195 Patent, and it consistent with my opinion of the claim scope. The claimed design was allowed over all the prior art that was cited in the file history.

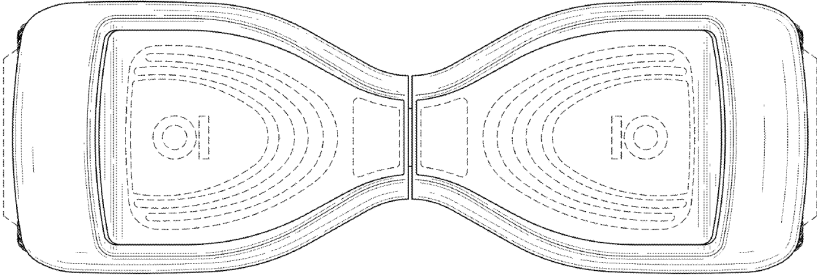
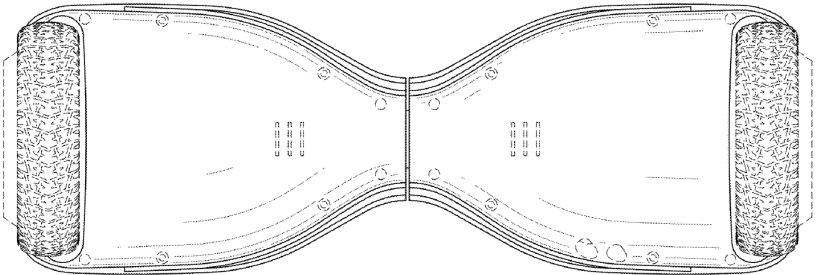
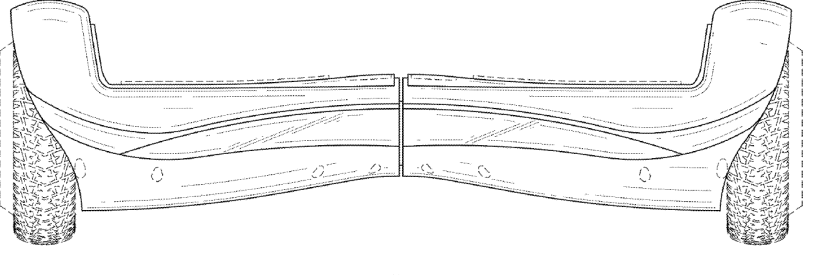
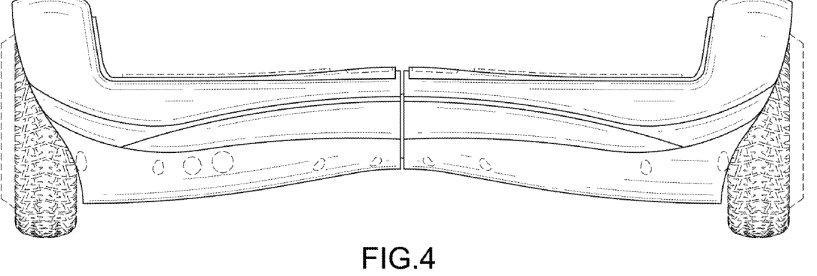
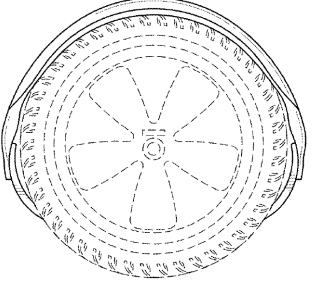
#### **E. Examination of the ‘112 Patent**

The ‘112 Patent is also titled “Human-Machine Interaction Vehicle” and has a filing date of Feb 29, 2016. It claims priority to a foreign application CN 201530481979.4 dated 11/26/2015.

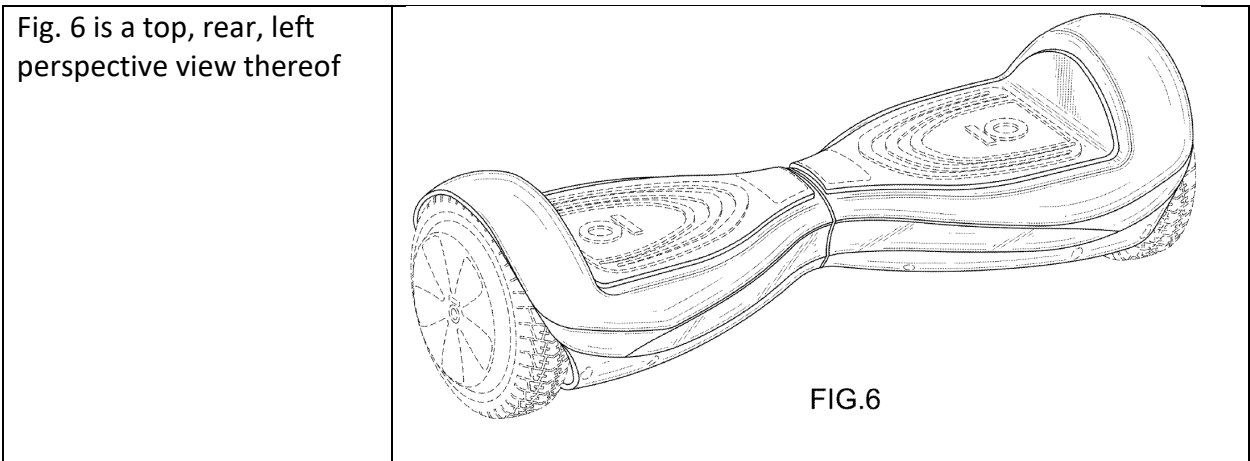
The patent has 6 figures, and states “the broken lines are for the purpose of illustrating portions of the human-machine interaction vehicle and environmental structure which form no part of the claimed design”.



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Table 4: The Claimed Design of the '112 Patent	
Fig. 1 is a top plan view of a human-machine interaction vehicle showing my new design	 <p style="text-align: center;">FIG.1</p>
Fig. 2 is a bottom plan view thereof	 <p style="text-align: center;">FIG.2</p>
Fig. 3 is a front elevational view thereof	 <p style="text-align: center;">FIG.3</p>
Fig. 4 is a rear elevational view thereof	 <p style="text-align: center;">FIG.4</p>
Fig. 5 is a right side view thereof, the left side view being a mirror image thereof	

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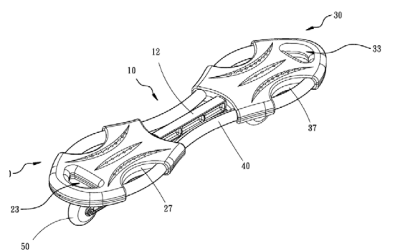
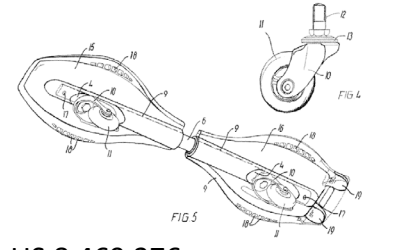
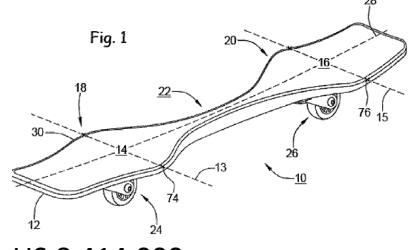
What is claimed is the overall ornamental design of a Human-Machine Interaction Vehicle as described in the patent and shown in the figures. The claimed design does not include the areas shown in broken lines, such as the wheels, circular holes on the bottom surface, and various patterns and lines on the top surfaces.

I have reviewed the prosecution history of the ‘112 Patent, and it consistent with my opinion of the claim scope. The claimed design was allowed over all the prior art that was cited in the file history.

**F. The Cited Prior Art Show The Patents-In-Suit Have A Broad Scope**

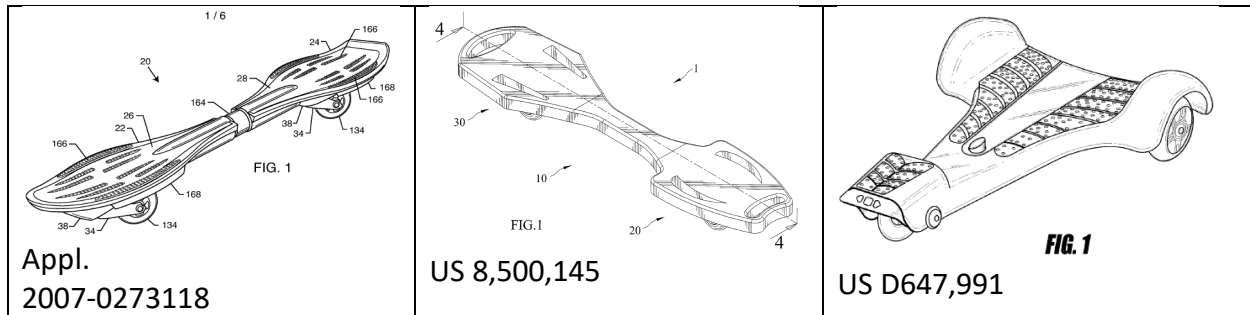
The prior art is used to compare to the claimed design of the patent to find the scope of the design in the ordinary observer test. It is also used to compare the accused product to the claimed designs to evaluate if the accused product is closer to the claimed design than the prior art.

I have analyzed all the cited prior art of the Patents-In-Suit. Below I present one selected view from each of the cited prior art to provide an overview of the state-of-the-art at the time of the filing of each patent. As can be seen in the table below, each of the Patents-In-Suit differed highly from the prior art that preceded them.

Table 5: The Cited Prior Art From the Face of the ‘723 and ‘256 Patents		
 <p>FIG. 2</p> <p>US 8,118,319</p>	 <p>FIG. 5</p> <p>US 8,469,376</p>	 <p>Fig. 1</p> <p>US 8,414,000</p>



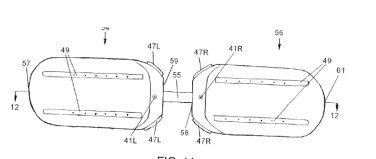
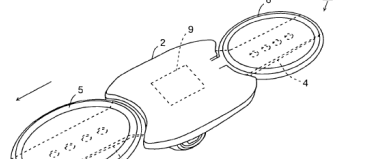
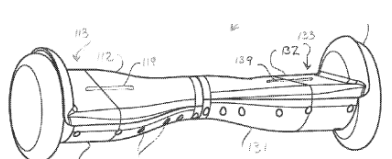
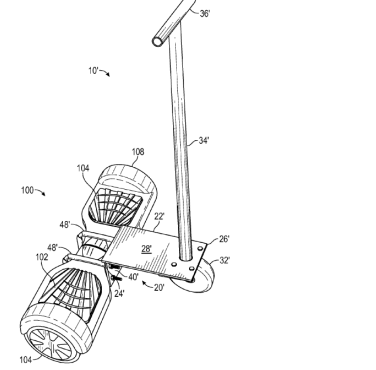
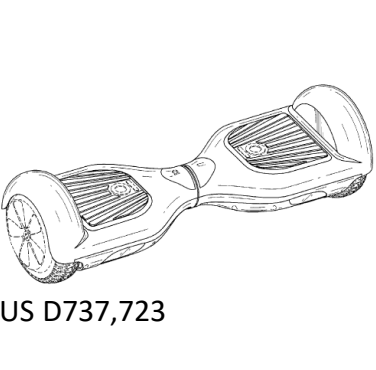
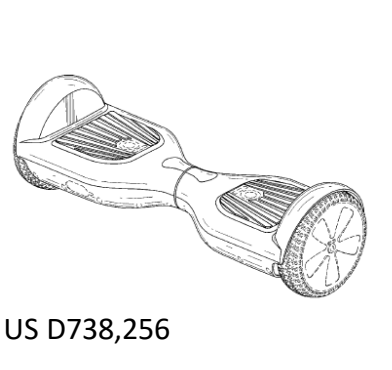
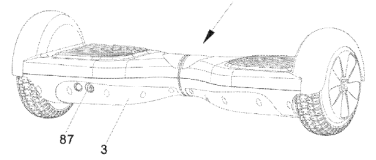
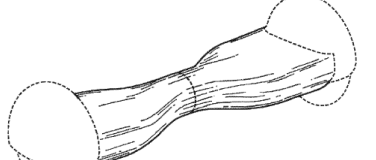
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While some of the individual components of the '723 and '256 Patents are represented in some of the prior art, the overall impression of the claimed design of the '723 and '256 Patents is entirely unique. The prior art is vastly different in many ways and therefore the '723 and '256 Patents enjoy a very broad scope.

None of the prior art create the impression of an integrated 'hourglass' body with a relatively flat surface across the top of the main body and arched covers over the wheel area.

Table 6: The Cited Prior Art From the Face of the '195 Patent

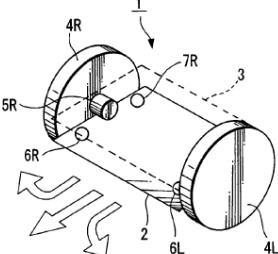
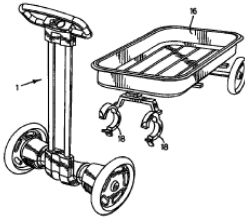
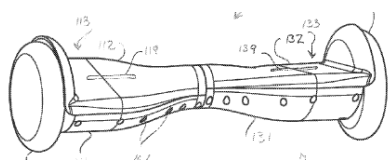
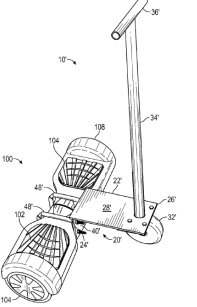
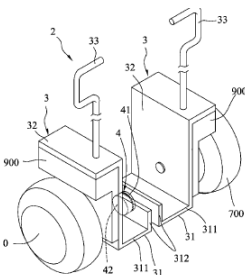
 <p>FIG. 11</p> <p>US 6,834,867</p>	 <p>US 7,424,927</p>	 <p>US 8,738,278</p>
 <p>FIG. 9</p> <p>US 9,403,573</p>	 <p>US D737,723</p>	 <p>US D738,256</p>
 <p>FIG. 4</p> <p>US 9,376,155</p>	 <p>US D739,906</p>	

## HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY

While some of the individual components of the ‘195 Patent are represented in some of the prior art, the overall impression of the claimed design of the ‘195 Patent is entirely unique.

None of the prior art create the impression of an integrated ‘hourglass’ body with many horizontal styling lines across the body and a relatively flat surface across the top, arched covers over the wheel area, larger radii on the front and back of the underside. Unlike any of the prior art the foot plates narrow as they extend toward the center.

**Table 7: A Selection of the Cited Prior Art from the ‘112 Patent**

 <p>US 7,481,291</p>	 <p>US 7,635,037</p>	 <p>US 8,738,278</p>
 <p>US 9,403,573</p>	 <p>US 9,499,228</p>	

## HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY



While some of the individual components of the ‘112 Patent are represented in some of the prior art, the overall impression of the claimed design of the ‘112 Patent is entirely unique.

None of the prior art create the impression of an integrated ‘hourglass’ body with many angled lines across the body and a relatively flat surface across the top, arched covers over the wheel area, larger radii on the front and back of the underside. Unlike any of the prior art the foot plates stretch across almost the full width of main body.

#### IV. OVERVIEW OF THE ACCUSED PRODUCTS

The Accused Products<sup>1</sup> have an integrated ‘hourglass’ body with many horizontal styling lines across the body and a relatively flat surface across the top, arched covers over the wheel area, larger radii on the front and back of the underside, and elongated light panels on the front surface. The foot plates narrow as they extend toward the center

Also, while they are not exact duplicates of each other but share very similar traits in their format, proportions and certain features, and share the same overall impression to an Ordinary Observer in light of the prior art.

Table 8: Infringing products by Defendants Gyroor	
Name and Store names	Infringing product
<b>“Gyroor A”:</b>  Gyroor; (Gyroor.com; gyroorboard.com); Gaodeshang-US; Gyroshoes; HGSM; Urbanmax; Jiangyou-US	
<b>“Gyroor B”:</b>  Gyroor (Gyroor.com; gyroorboard.com); Gaodeshang-US	

<sup>1</sup> I have previously reviewed two of the three infringing products under Species II of my report on October 16, 2020.

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<p><b>“Gyroor C”:</b></p> <p>Gyroor US;  Jiangyou-US;  (Gyroor.com; gyroorboard.com);  Gaodeshang-US</p>	
<p><b>“Gyroor D”:</b></p> <p>Fengchi-US</p>	

## V. THE ACCUSED PRODUCTS INFRINGE THE PATENTS-IN-SUIT

I conducted a side-by-side comparison of the Accused Products and the Claimed Designs. My analysis was limited to the Claimed Designs as depicted by the solid lines in the figures of the Patents-In-Suit and did not include the unclaimed portions of the design depicted in broken lines.

The Accused Products and the claimed designs of the Patents-In-Suit are both conceptually and functionally identical in that they are all Hoverboards, for recreational use by consumers.

As mentioned above, the scope of the claim of a patented design encompasses its visual appearance as a whole, and in particular the ‘visual impression’ it creates. Even if various ornamental elements which make up the whole of a design may be slightly different in isolation, infringement occurs if the overall visual impression is substantially similar.

In my analysis detailed below I conclude that the Accused Products are not plainly dissimilar to the Patented Designs and are substantially the same as the claimed designs of the Patents-In-Suit in the eyes of the ordinary observer. As an additional step, I also analyzed the patents’ cited prior art against the Accused Products and Patented Designs to find whether the Accused Designs are closer to the Patented Designs than the cited prior art, as shown below.

### A. The Accused Products Infringe on the ‘723 Patent

Although the below charts only present selected views, my analysis was undertaken on each of the accused products individually, based upon the entirety of the reference materials.



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Table 9: Comparison of the Claimed Design of the ‘723 Patent to the Accused Products

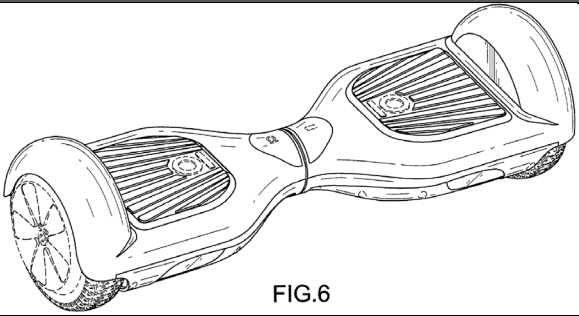


FIG.6

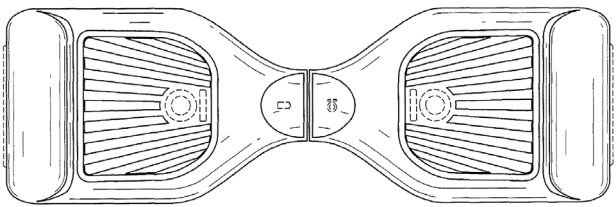


FIG.1



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Giving due consideration to the legal standards as outlined in Section II, the examination illustrated in the table above allows for no other reasonable conclusion than that the overall visual impression of the Claimed Design of the ‘723 Patent and the Accused Products are not plainly dissimilar.

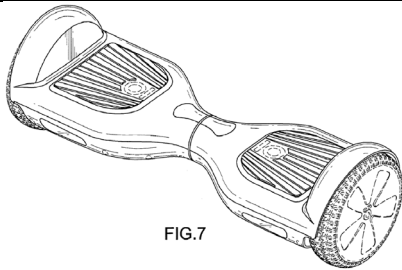




In the eyes of the ordinary observer, the claimed design of the ‘723 is substantially the same as the overall visual impression presented by the Accused Products. Unlike the cited prior art shown in Section III Chapter F, the claimed design of the ‘723 Patent and the Accused Products share the same overall impression and have an integrated ‘hourglass’ body with a relatively flat surface across the top of the main body, arched covers over the wheel area, larger radii on the front and back of the underside, and elongated light panels on the front surface.

In the eyes of the ordinary observer, the claimed design of the ‘723 is substantially the same as the visual impression presented by the Accused Products. Also, the Accused Products are closer to the claimed design of the ‘723 Patent than to the cited prior art of the ‘723 Patent.

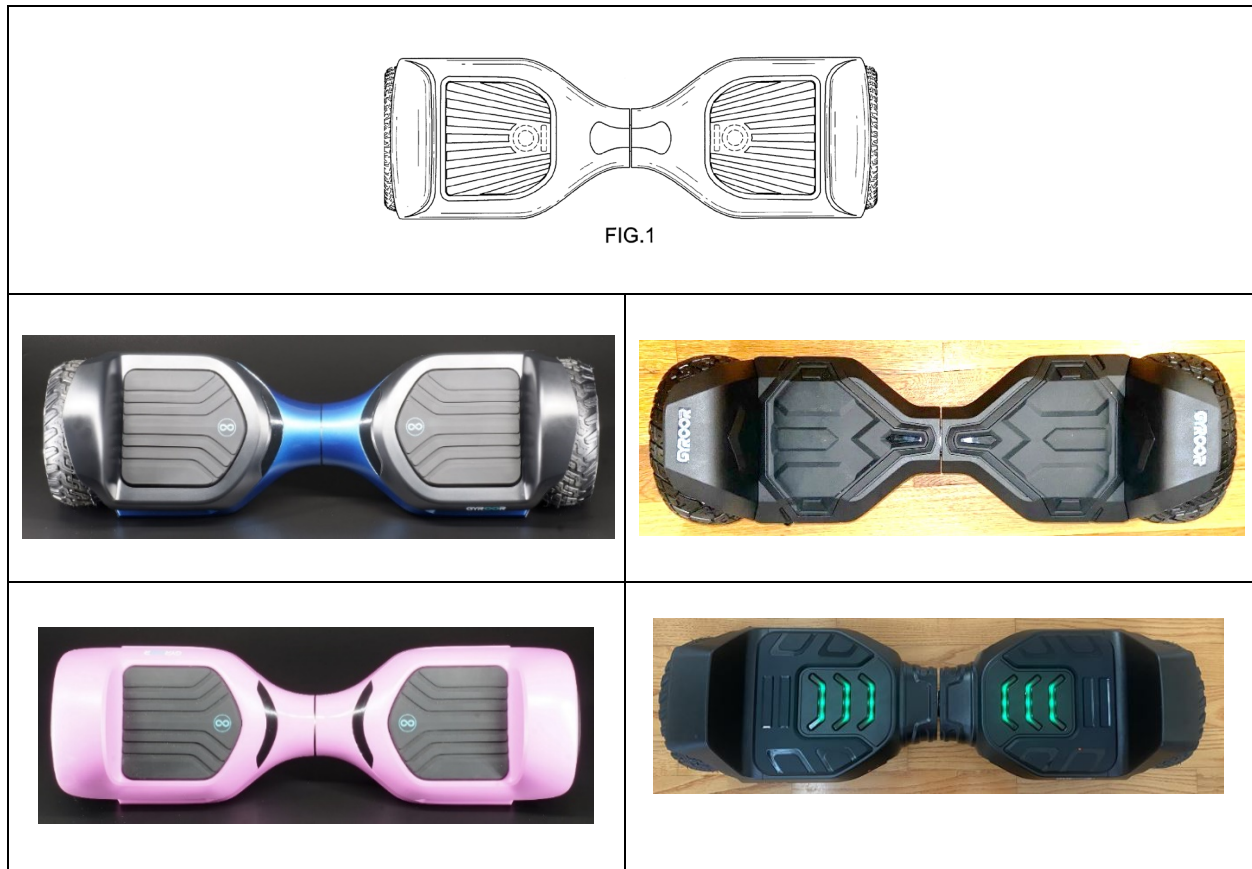
#### **B. The Accused Products Infringe on the ‘256 Patent**

Although the below charts only present selected views, my analysis was undertaken on each of the accused products individually, based upon the entirety of the reference materials.

**Table 10: Comparison of the Claimed Design of the ‘256 Patent to the Accused Products**

 <p>FIG. 7</p>	
	
	

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Giving due consideration to the legal standards as outlined in Section II, the examination illustrated in the table above allows for no other conclusion than that the overall visual impression of the Claimed Design of the '256 Patent and the Accused Products shown above are not plainly dissimilar.

Unlike the cited prior art shown in Section III Chapter F, the claimed design of the '256 Patent and the Accused Products share the same overall impression and have an integrated 'hourglass' body with a relatively flat surface across the top of the main body, arched covers over the wheel area, larger radii on the front and back of the underside, and elongated light panels on the front surface.

In the eyes of the ordinary observer, the claimed design of the '256 is substantially the same as the visual impression presented by the Accused Products. Also, the Accused Products are closer to the claimed design of the '256 Patent than to the cited prior art of the '256 Patent.









### **C. The Accused Products Infringe on the '195 Patent**

Although the below charts only present selected views, my analysis was undertaken on each of the accused products individually, based upon the entirety of the reference materials.



HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY

Table 11: Comparison of the Claimed Design of the ‘195 Patent to the Accused Products

 <p>FIG. 6</p>	
	
	
 <p>FIG. 1</p>	
	
	



HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY

Giving due consideration to the legal standards as outlined in Section II, the examination illustrated in the table above allows for no other conclusion than that the visual impression of the claimed design of the ‘195 Patent and the Accused Products shown above are not plainly dissimilar.

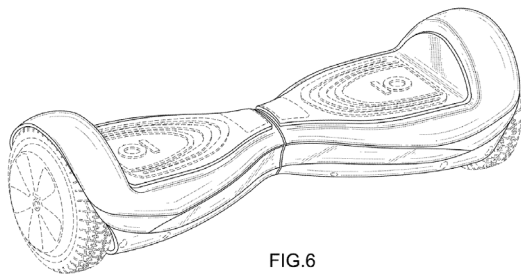


Unlike the cited prior art shown in Section III Chapter F, the claimed design of the ‘195 Patent and the Accused Products share an integrated ‘hourglass’ body with many horizontal styling lines across the body and a relatively flat surface across the top, arched covers over the wheel area, larger radii on the front and back of the underside. Unlike any of the prior art the foot plates narrow as they extend toward the center.

In the eyes of the ordinary observer, the claimed design of the ‘195 is also substantially the same as the visual impression presented by the Accused Products. Also, the Accused Products are closer to the claimed design of the ‘195 Patent than to the cited prior art of the ‘195 Patent.

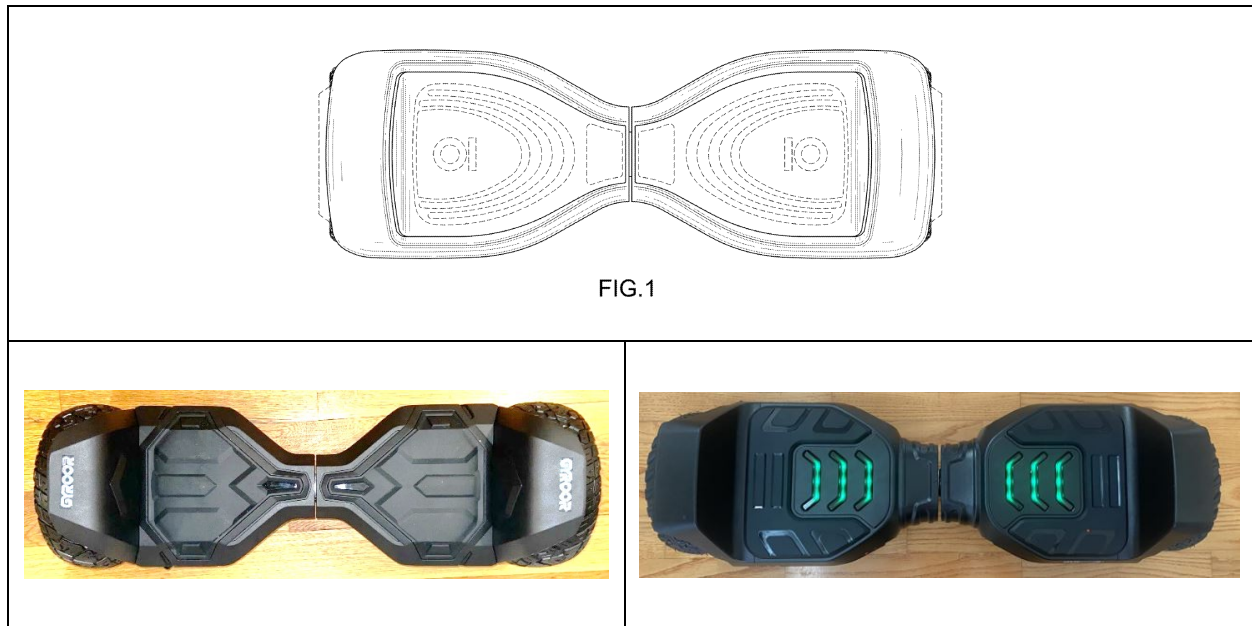
#### **D. Two of The Accused Products Infringe on the ‘112 Patent**

Although the below charts only present selected views, my analysis was undertaken on each of the accused products individually, based upon the entirety of the reference materials.

**Table 12: Comparison of the Claimed Design of the ‘112 Patent to the Accused Products**

 <p>FIG. 6</p>	
	

HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY



Giving due consideration to the legal standards as outlined in Section II, the examination illustrated in the table above allows for no other conclusion than that the visual impression of the claimed design of the '112 Patent and the Accused Products Gyroor B and Gyroor D shown above are not plainly dissimilar.

Unlike the cited prior art shown in Section III Chapter F, the claimed design of the '112 Patent and the Accused Products share an integrated 'hourglass' body with many lines angling across the body and a relatively flat surface across the top, arched covers over the wheel area, larger radii on the front and back of the underside. Unlike any of the prior art the foot plates stretch across almost the full width of main body.

In the eyes of the ordinary observer, the claimed design of the '112 is also substantially the same as the visual impression presented by the Accused Products Gyroor B and Gyroor D, which are also closer to the claimed design of the '112 Patent than to the cited prior art of the '112 Patent.

## VI. CONCLUSION

Based upon the application of the legal principles described in this declaration, and upon my examination, analysis and comparisons of the Patents-In-Suit, their file histories, the prior art, and the Accused Products, it is my opinion that an ordinary observer would find the Accused Products to be substantially similar to the Claimed Designs.

- a. The Accused Products' overall design and visual impression is substantially the same as the Claimed Designs, with only minor and inconsequential differences observable upon even close inspection.

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- b. The Accused Products appear substantially the same as the Claimed Designs of the Patents-In-Suit in the eye of an ordinary observer who is familiar with the prior art.
- c. The Accused Products are not plainly dissimilar to the claimed design of the ‘723 Patent and are substantially the same as the claimed design of the ‘723 Patent in the eyes of the ordinary observer.
- d. The Accused Products are not plainly dissimilar to the claimed design of the ‘256 Patent and are substantially the same as the claimed design of the ‘256 Patent in the eyes of the ordinary observer.
- e. The Accused Products are not plainly dissimilar to the claimed design of the ‘195 Patent and are also substantially the same as the claimed design of the ‘195 Patent in the eyes of the ordinary observer.
- f. The Accused Products Gyroor B and Gyroor D are not plainly dissimilar to the claimed design of the ‘112 Patent and are also substantially the same as the claimed design of the ‘112 Patent in the eyes of the ordinary observer.

## VII. RESERVATION OF RIGHTS

My current opinions are set forth in this declaration. However, my analysis is continuing, and I thus reserve the right to supplement or amend my declaration and to rely on additional documents, prior art, or discovery or testimony that may come to my attention.

Moreover, I may make additions, deletions, or modifications to this declaration and my opinions in the future that would be reflected in my testimony at the trial and/or additional declarations that I may be asked to submit in this case. I also reserve the right to rely on all other expert declarations submitted in this case. For the forthcoming trial, I may prepare diagrams, charts, other demonstratives, and/or demonstrations that illustrate the issues presented. I reserve the right to respond to additional arguments or analyses proffered by expert witnesses and/or the Plaintiff, and I understand that I may be asked to give rebuttal testimony on matters not covered in this expert declaration.

I HEREBY DECLARE under penalty of perjury that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. §1001.

Dated: August 24, 2021

Respectfully Submitted,

A handwritten signature in dark ink, appearing to read "P. Hatch", written over a horizontal line.

Paul Hatch